

IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1 (Original). A communication network, comprising:
a network node;
a first terminal having a first modem connected to said network node via a master communication loop; and
a second terminal having a second modem also connected to said network node via said master communication loop, wherein said first and second terminals are adapted to communicate with said network node and each other with signals compatible with ADSL standards.

2 (Original). The communication network as specified in Claim 1 wherein said first terminal and said second terminal are locally proximate one another.

3 (Original). The communication network as specified in Claim 2 wherein said master communication loop comprises a twisted pair of conductors.

4 (Original). The communication network as specified in Claim 2 wherein said network node is adapted to permit and enable said first terminal to communicate with said second terminal via said network node.

5 (Original). The communication network as specified in Claim 4 wherein said first terminal initiating a communication with said second terminal maintains a superframe.

6 (Original). The communication network as specified in Claim 5 wherein said network node directs said first terminal to maintain the superframe.

7 (Original). The communication network as specified in Claim 1 wherein said first terminal and said second terminal are adapted to simultaneously communicate over said common master communication loop with said network node.

8 (Original). The communication network as specified in Claim 1 wherein each said first terminal and said second terminal are adapted to communicate over said common master communication loop using a technique selected from the group consisting of: time division, frequency division, and code division.

9 (Original). The communication network as specified in Claim 2 wherein said network node is a central office (CO) located remote from both said first and second terminal.

10 (Original). The communication network as specified in Claim 1 wherein said first terminal is a personal computer.

11 (Original). A modem adapted for use at a network node, comprising:
a transceiver adapted to communicate information with a remote first terminal over a master communication loop with signals compatible with ADSL standards,
wherein said transceiver is further adapted to communicate with a second remote terminal over said same master communication loop with signals compatible with ADSL standards.

12 (Original). The modem as specified in Claim 11 wherein said first and second terminals are adapted to be co-located, said modem being adapted to facilitate communications between each said terminal over said common master communication loop.

13 (Original). The modem as specified in Claim 12 wherein said master communication loop comprises a twisted pair of conductors.

14 (Original). The modem as specified in Claim 12 wherein said modem establishes said first terminal initiating a communication as a master maintaining a superframe.

15 (Original). The modem as specified in Claim 14 wherein said modem is adapted to simultaneously communicate with said first terminal and said second terminal.

16 (Original). The modem as specified in Claim 15 wherein said modem facilitates said simultaneous communication using a technique selected from the group consisting of: time division, frame division and code division.

17 (Original). A method of communicating signals compatible with ADSL standards over a communication network comprising:

a network node;

a first terminal having a first modem connected to said network node via a master communication loop;

a second terminal having a second modem also connected to said network node via said master communication loop, wherein said first and second terminals are adapted to communicate with said network node and each other with signals compatible with ADSL standards;

comprising the steps of:

said first terminal initiating a communication towards said second terminal via said common master communication loop; and

said network node directing said first terminal to maintain a superframe.

18 (Original). The method as specified in Claim 17 further comprising the step of said network node facilitating said communication between said first terminal and said second terminal using a technique selected from the group consisting of: time division, frame division, and code division.

19 (Original). The method as specified in Claim 17 wherein said master communication loop comprises a single twisted pair of conductors.

20 (Original). The method as specified in Claim 17 wherein said network node facilitates simultaneous communications between said first terminal and said second terminal over said master communication loop.

21 (Previously Added). A method of communication in a network comprising a network node and a plurality of modems coupled to the network node by a common master loop, the method comprising:

initiating communication between a first modem and the network node;
initiating communication between a second modem and the network node;
directing the first modem to release a portion of communication bandwidth used by the first modem;
using the portion of communication bandwidth released by the first modem for the second modem to establish simultaneous communication over the common master loop between the network node and the first and second modems.

22 (Previously Added). The method of claim 21, wherein the first modem is configured to communicate with the network node as a master terminal while maintaining a superframe of the communication bandwidth.

23 (Previously Added). The method of claim 22, wherein the first and second modems are configured to communicate with the network node using time division multiplexing; and the first modem releases one or more time frames for the second modem to communicate in the network.

24 (Previously Added). The method of claim 22, wherein the first and second modems are configured to communicate with the network node using frequency division multiplexing; and the first modem releases one or more frequency tones for the second modem to communicate in the network.

25 (Previously Added). The method of claim 21, wherein the first and second modems are configured to communicate with each other via the network node over the common master loop.

26 (Previously Added) The method of claim 21, wherein the first and second modems are configured to communicate in the network using signals compatible with ADSL standards.

27 (Previously Added). The method of claim 21, wherein the common master loop comprises a single twisted pair of conductors.

28 (Previously Added). A method of operating a modem in a network, the method comprising:

initializing the modem to communicate with a network node via a master loop; and upon receiving a signal from the network node, releasing a portion of communication bandwidth used by the modem for one or more communication terminals coupled to the network node via the master loop, wherein the modem releases the portion of the communication bandwidth while maintaining a superframe of the communication bandwidth.

29 (Previously Added). The method of claim 28, wherein the modem is configured to communicate with the network node using time division multiplexing; and

the modem releases one or more time frames for the one or more communication terminals.

30 (Previously Added). The method of claim 28, wherein the modem is configured to communicate with the network node using frequency division multiplexing; and

the modem releases one or more frequency tones for the one or more communication terminals.

31 (Previously Added). The method of claim 28, wherein the modem and the one or more communication terminals are configured to communicate in the network using signals compatible with ADSL standards.

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